

ABSTRACT

Fast Arm-Swing Tether supports lower arms and allows a runner or walker to maintain maximum stride frequency. Tethering thumbs/hands raises natural frequency of pendulum motion of arm swing to ensure that stride rate is not limited by slow arm movement. The innovation keeps hands and arms up and virtually eliminates lower-arm rotational inertia, thus allowing the lower arms to swing essentially as point masses, resulting in a higher natural frequency of pendulum motion of arm swing to ensure stride frequency is not limited by slow arms. Supporting the hands also reduces effort required to swing arms or to keep elbows locked. This invention relieves arm fatigue for long distance running or walking in addition to allowing greater arm movement. Fast Arm-Swing Tether could be made in any fashion as long as a frontal protrusion can provide adequate support to hang pendulum tethers to keep hands elevated.